

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/695,306

REMARKS

Claims 1-8 are all the claims pending in the application. Applicant thanks the Examiner for indicating that claims 2-4 and 6-8 contain patentable subject matter.

The proposed drawing correction filed January 29, 2002 has been approved by the Examiner. Corrected drawings are submitted herewith accordingly.

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Sonehara (4,870,484).

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sonehara (4,870,484) in view of Yamamoto et al. (5,341,231).

Analysis

Claim 1 recites a plane light source which includes a light pipe having an upper surface, lower surface and an incidence side surface. A light output means is provided on the upper surface so that light incident on the incidence side surface exits from the lower surface through the light output means while light incident on the lower surface is transmitted thought the upper surface.

Sonehara discloses a liquid light crystal shutter on the upper surface of the light pipe. However, this reference does not teach or suggest that the liquid light crystal shutter (i.e., light output means) causes light incident on the incidence side surface to exit from the lower surface through the light output means.

In the present invention, light that is incident on the incidence side surface 11c is reflected back to the lower surface by the light output means. Sonehara does not teach or suggest this concept for the light incident on the incidence side surface.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/695,306

Thus, claim 1 is not anticipated by Sonehara. Moreover, claim 5 is patentable at least by virtue of its dependency from claim 1.

Finally, Applicant submits the following comments with respect to the teachings of Yamamoto.

Yamamoto relates to a "back light" type device in which light is output by means of reflection and diffusion within the light pipe. In Yamamoto's description, there is no teaching other than "back light" device. Incidentally, the subject matter of Yamamoto is directed to color of the light source.

Yamamoto does not teach length of the light source in the description. Since the light is diffused within the light pipe of Yamamoto's device irrespective of the length of the light source, there is no necessity to specify the length of the light source in Yamamoto. Thus, there is no teaching or suggestion in Yamamoto to provide the light source with a specific length as claimed.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/695,306

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Twice Amended) A plane light source unit comprising:

a light pipe including an upper surface, a lower surface, and an incidence side surface, and including a light output means formed in said upper surface so that light incident on said incidence side surface [exists] exists from said lower surface through said light output means while light incident on said lower surface is transmitted through said upper surface; and

a linear light source disposed on said incidence side surface of said light pipe, said linear light source having an effective light emission region which is longer than a longitudinal length of said incidence side surface,

whereby said light incident on the lower surface of said light pipe is transmitted and made visible through the upper surface of said light pipe.